

REMARKS

Claims 1-3 and 5-9 remain pending in the present application. Claim 4 has been cancelled. Claims 1-3 have been amended. Claims 5-9 are new. Basis for the amendments and new claims can be found throughout the specification, claims and drawings originally filed.

ELECTION/RESTRICTION

Applicants hereby affirm the election of Grove I, Claims 1-3 made on June 15, 2004 by Mr. Keith Miller during a telephone conversation.

REJECTION UNDER 35 U.S.C. § 102

Claims 1 and 3 are rejected under 35 U.S.C. § 102(b) as being anticipated by Flemings, et al. (U.S. Pat. No. 6,250,365). Claims 1 and 3 are rejected under 35 U.S.C. § 102(b) as being anticipated by Nakano (U.S. Pat. No. 4,798,237).

Flemings, et al. (U.S. Pat. No. 6,250,365) discloses the temperature control of an upper portion 30 (0) and a lower portion 32 (2) in a mold 18. However, in Flemings, et al., the mold is constricted by bolting together the upper portion 30, the lower portion 32 and an insulating layer 28 (column 2, lines 54-57). Thus, it is not clear from Flemings, et al. if there is a fixed mold section and a movable mold section. Once the casting has solidified, the mold can be opened to extract the casting (column 3, lines 26-28). Thus, it is not clear in Flemings, et al. how or if the upper and lower sections move.

Figure 2a discloses heaters 34 in the lower portion 32 and the specification states that conventional heating and cooling mechanisms keep the upper portion 30

below the melting point. Claim 1 defines that the fixed mold section is provided with only heating means and the movable mold section is provided with only cooling means. This clearly distinguishes over Flemings, et al. which discloses two mold sections (neither one fixed or moving) where one has heating and the other has heating and cooling.

Nakano (U.S. Pat. No. 4,798,237) discloses a molding die A comprising a male die (movable mold section) a1 with a cooling mechanism 1 and a heating mechanism 1' and a female die (fixed mold section) with a cooling mechanism 5 and a heating mechanism 5'. Claim 1 has been amended to define the fixed mold section as having only heating means and the moving mold section as having only cooling means.

Thus, Applicants believe Claim 1, as amended, patentably distinguishes over the art of record. Likewise, Claim 3, which depends from Claim 1, is also believed to patentably distinguish over the art of record. Reconsideration of the rejection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakano (U.S. Pat. No. 4,798,237) or Flemings, et al. (U.S. Pat. No. 6,250,365) as applied to Claim 1 above in paragraph 7 and 8, and further in view of Yamaguchi, et al. (U.S. Pat. No. 6,460,596). Claim 2 depended from Claim 1. As stated above, Claim 1 has been amended and is now believed to patentably distinguish over the art of record. Thus, Claim 2 is also believed to patentably distinguish over the art of record. Reconsideration of the rejection is respectfully requested.

NEW CLAIMS

New Claims 5-9 ultimately depend from Claim 1 and are believed to read on the elected invention. Claims 5-9 define additional features of the present invention and thus they are believed to be patentable.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By:



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